

REMARKS

This Amendment is responsive to the Final Action mailed March 24, 2003. The claim amendments included herein are merely clarifying amendments and are not meant to change the intended scope of the claims. Thus, the amendments present the rejected claims in better form for consideration on appeal, and they should be entered in due course. Moreover, the amendments are manifest, requiring only a cursory review by the Examiner, thereby providing additional ground for their entry.

Claims 1-6 and 23-33 were pending in the application. In the Final Action, claims 5, 6, 23-26 and 31-33 were withdrawn from consideration, and claims 1-4 and 27-30 were rejected. In this Amendment, claims 1-4 and 30 have been amended, and new claims 34-48 have been added. Claims 1-4, 27-30 and 34-48 thus remain for consideration.

Applicants submit that the application is now in condition for allowance and request reconsideration and withdrawal of the rejections in light of the following remarks.

§112 Rejections

Claims 3 and 30 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. More specifically, the Examiner asserted that in claim 3 the phrase "at least one additional step" was not clear, and that in claim 30 it was not clear where a polysilicon film is deposited.

Applicants have amended claim 3 to substitute the language "forming at least a surface protecting film on the main surface of the target substrate" for the

language “at least one additional step,” and have amended claim 30 to specify that a polysilicon film is deposited “on the main surface of the semiconductor substrate and in the trench.”

Applicants submit that the amendments to claims 3 and 30 render the claims compliant with §112, and accordingly request withdrawal of the rejections under §112.

§102 and 103 Rejections

Claims 1-3 were rejected under 35 U.S.C. §102(e) as being anticipated by Black et al. (U.S. Patent No. 6,265,314).

Claims 1-4 and 27-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant’s Admitted Prior Art (APA) in view of Black.

Claim 30 was rejected under 35 U.S.C. §103(a) as being unpatentable over Black as applied to claim 1, in view of Jenq (U.S. Patent No. 5,795,804).

Applicants’ invention as recited in independent claims 1 and 30 recites that “[a] film [] on the peripheral portion and the beveled portion is removed under a condition that the film has non-selectivity to the [substrate].” Neither Black, Applicants’ Admitted Prior Art nor Jenq discloses that a film on the peripheral portion and the beveled portion is removed under a condition that the film has non-selectivity to the substrate.

Black et al (US 6,265,314) aims at removing defects 26 existing on or near the edge region 20 of the wafer 14 (FIG. 3). However, Black et al (US 6,265,314) does not show the claimed feature of removing a film formed on the peripheral portion and the beveled portion under a condition that the film has non-selectivity to the substrate. In

fact, Black et al (US 6,265,314) makes no mention that the removing treatment is carried out on condition of non-selectivity.

Regarding the rejections under §102 based on Black, it is respectfully pointed out that a two-prong inquiry must be satisfied in order for a Section 102 rejection to stand. First, the prior art reference must contain all of the elements of the claimed invention. *See Lewmar Marine Inc. v. Bariant Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Second, the prior art must contain an enabling disclosure. *See Chester v. Miller*, 15 U.S.P.Q.2d 1333, 1336 (Fed. Cir. 1990). A reference contains an enabling disclosure if a person of ordinary skill in the art could have combined the description of the invention in the prior art reference with his own knowledge of the art to have placed himself in possession of the invention. *See In re Donohue*, 226, U.S.P.Q. 619, 621 (Fed. Cir. 1985).

As mentioned above, Black does not contain all of the elements of the claimed invention, and therefore the invention is not anticipated by Black.

Regarding the rejections under §103, it is well-settled that there must be some prior art teaching which would have provided the necessary incentive or motivation for modifying the reference teachings. *In re Laskowski*, 12 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989); *In re Obukowitz*, 27 U.S.P.Q. 2d 1063 (B.P.A.I. 1993). Further, “obvious to try” is not the standard under 35 U.S.C. §103. *In re Fine*, 5 U.S.P.Q. 2d 1596, 1599 (Fed. Cir. 1988). And as stated by the Court in *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783-1784 (Fed. Cir. 1992): “The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification.” Also, the Examiner is respectfully reminded that for the Section 103 rejection to be proper, both the suggestion of the

claimed invention and the expectation of success must be founded in the prior art, and not Applicants' disclosure. *In re Dow*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988).

In the present case, Applicants' Admitted Prior Art (FIGS.1A-1C) discloses removal of the irregular uneven portion 7 generated in the peripheral portion 1a and the beveled portion 1 of the wafer (FIG. 1A). However, the removal disclosed in the prior art is carried out by using wet etching (specification page 5, lines 19-25). It is difficult to realize non-selectivity by wet etching, since wet etching is a chemical reaction.

Since neither Black nor Applicants' APA discloses that a film on the peripheral portion and the beveled portion is removed under a condition that the film has non-selectivity to the substrate, and neither Black nor Applicants' APA suggests the desirability of such a modification, claims 1 is not obvious over the combination of the APA and Black

Furthermore, Applicants note that Jenq fails to cure the deficiencies of Black, and thus claim 30 is not obvious over the combination of Black and Jenq.

Claims 2-4 and 27-29 depend on claim 1. Since claim 1 is believed to be patentable over the cited references, claims 2-4 and 27-29 are believed to be patentable over the cited references on the basis of their dependency on claim 1.

Applicants submit that all of the claims now pending in the application are in condition for allowance, which action is earnestly solicited.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as

presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicants' undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

If any issues remain, or if the Examiner has any further suggestions, he/she is invited to call the undersigned at the telephone number provided below.

The Examiner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account No. 50-0320.

The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:


Grace L. Pan
Registration No. 39,440
Bruno Polito
Registration No. 38,580
Tel. (212) 588-0800
Fax (212) 588-0500